

REMARKS

Objections to the Specification

The Examiner has objected to the specification because of a perceived difference between sequence ID NO:22 as portrayed on page 57, line 7 and SEQ ID NO:22 as provided in the sequence listing. The substitution of a Tyr for a Phe appears to be at position 668 on page 57 and at position 665 in the sequence listing. The sequence listing is designed to portray the sequence ID NO:22 as provided on pages 56-57 of the specification. The amino acid sequence of SEQ ID NO:22 on pages 56-57 and in the sequence listing are identical. The substitution is at position 668. The discrepancy arises because of the alignment of the amino sequence with the position numbering in the sequence ID listing.

Objections to the Claims

Claims 35, 36, 41-43 and 46 were objected to for several informalities. The objection to claim 35 has been avoided by the cancellation of claim 35. Claims 36, 41-43 have been objected to as containing no elected subject matter.

35 USC §112

Claims 36, 41-43 and 46 were rejected under 35 USC §112, second paragraph, for being indefinite. The rejection is essentially for the reason given in the objection based on the perceived ambiguity of the position of the Tyr for a Phe substitution. The rejection is avoided for the reason discussed in responding to the objection to the specification.

Claims 34 and 46 were rejected under 35 USC §112, first paragraph, for lack of written description. The Examiner has stated that Claim 34 is directed to any possible DNA polymerase from ATCC Deposit 27978 and claim 46 is directed any nucleic acid polymerase made by the method of claim 44. The Examiner has stated that the specification only provides the representative species of the DNA polymerase having SEQ ID NO:22

The rejection is respectfully traversed. ATCC deposit 27978 contains *Thermus scotoductus* strain X-1. SEQ ID NO:14 provides the primary amino acid sequence of


the DNA polymerase in ATCC deposit 27978. SEQ ID NO:22 is derivative of SEQ ID NO:22 contains a Tyr to Phi substitution. The relationship between these to polymerases is apparent to a person of ordinary skill in the art reading the specification. Claim 34 has been amended to indicate that the claimed polymerase is the polymerase naturally encoded by the deposited strain (as well as obvious variants thereof). Claim 46 has been cancelled from being dependent on a withdrawn claim.

PETITION FOR EXTENSION OF TIME AND FEE AUTHORIZATION

Applicants hereby authorize the Commissioner to charge the Two-month Extension of Time fee, and any additional fees required, to Applied Biosystems Deposit Account No. 01-22313 (**Order No. 4767**)

Respectfully submitted,

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